

3C92 SPECIFICATIONS

A low frequency, high Bsat power material for use in power inductors at frequencies up to 0.2 MHz.

SYMBOL	CONDITIONS	VALUE	UNIT
μ_i	25 °C; ≤ 10 kHz; 0.25 mT	1500 $\pm 20\%$	
μ_a	100 °C; 25 kHz; 200 mT	≈ 5000	
B	25 °C; 10 kHz; 1200 A/m 100 °C; 10 kHz; 1200 A/m 140 °C; 10 kHz; 1200 A/m	≈ 540 ≈ 460 ≈ 400	mT
P_v	100 °C; 100 kHz; 100 mT 100 °C; 100 kHz; 200 mT	≈ 50 ≈ 350	kW/m ³
ρ	DC; 25 °C	≈ 5	Ωm
T_C		≥ 270	°C
density		≈ 4800	kg/m ³

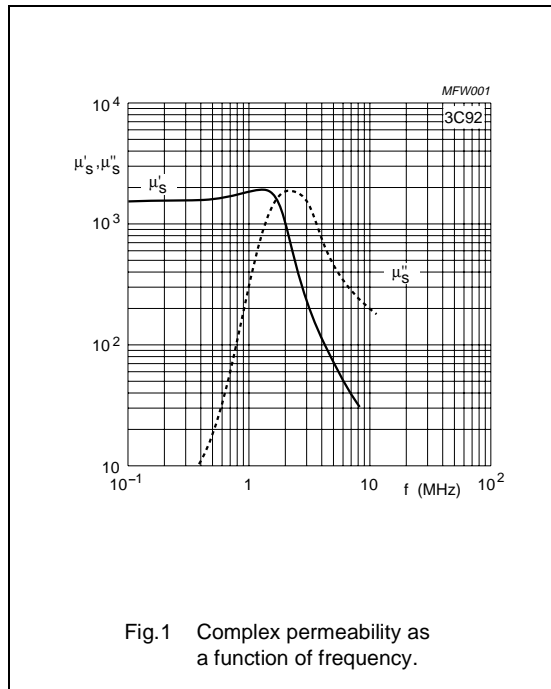


Fig.1 Complex permeability as a function of frequency.

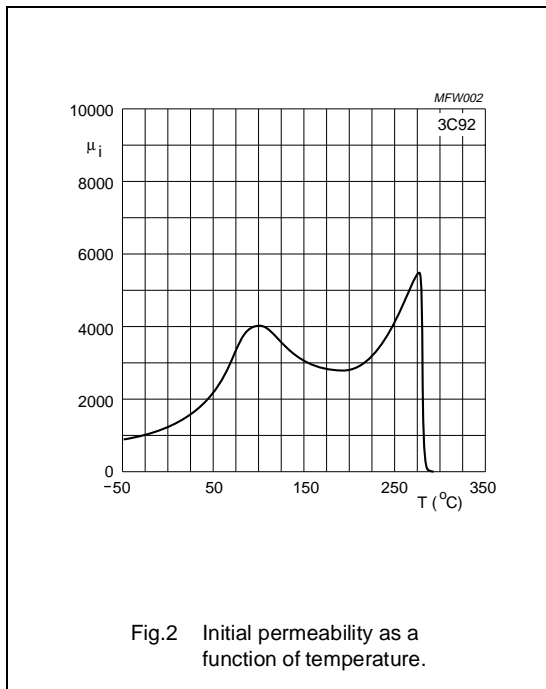


Fig.2 Initial permeability as a function of temperature.

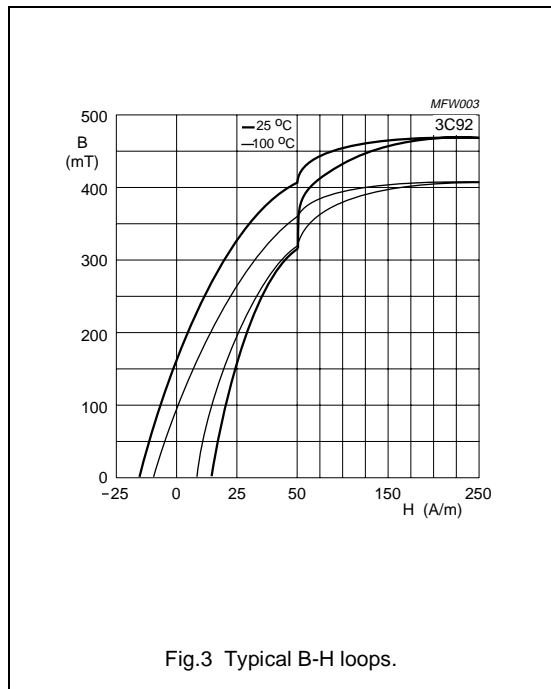


Fig.3 Typical B-H loops.

